



State of Utah

Department of
Environmental Quality

Richard W. Sprott
Executive Director

DIVISION OF AIR QUALITY
Cheryl Heying
Director

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

DAQE-IN0126620007-08

March 28, 2008

Doug Agee
XTO Energy, Incorporated
810 Houston Street
Fort Worth, Texas 76102-6298

Dear Mr. Agee:

Re: Intent to Approve: Modification to the Huntington I Natural Gas Compressor Station
Emery County – CDS B; ATT; NSPS; MACT; HAPs; TITLE V Minor
Project Code: N012662-0007

The attached document is the Intent to Approve for the above-referenced project. The Intent to Approve is subject to public review. Any comments received shall be considered before an Approval Order is issued.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Tim DeJulis. He may be reached at (801) 536-4012.

Sincerely,

John T. Blanchard, Manager
Minor New Source Review Section

JTB:TDJ:sa

cc: Southeastern Utah District Health Department

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

**INTENT TO APPROVE: Modification to
The Huntington I Natural Gas Compressor Station**

**Prepared By: Tim DeJulis, Engineer
(801) 536-4012
Email: tdjulis@utah.gov**

INTENT TO APPROVE NUMBER

DAQE-IN0126620007-08

Date: March 28, 2008

XTO Energy, Incorporated

Source Contact

**Doug Agee
(817) 885-2285**

**M. Cheryl Heying
Executive Secretary
Utah Air Quality Board**

Abstract

XTO Energy, Incorporated (XTO) has requested permission to modify operations at the Huntington 1 natural gas compressor station. This remote Emery County compressor station will consist of three 1,245 horsepower compressor engines, a dehydration unit, a Carbon Dioxide removal unit, and several storage tanks, and will produce as much as 40,000,000 cubic feet of natural gas per day.

The Notice of Intent (NOI) for the above-referenced project has been evaluated and has been found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an Approval Order (AO) by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notice of intent to approve will be published in the Sun Advocate on April 1, 2008. During the public comment period, the proposal and the evaluation of its impact on air quality will be available for both you and the public to review and comment. If anyone so requests a public hearing, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated.

Please review the proposed AO conditions during this period and make any comments you may have. The proposed conditions of the AO may be changed as a result of the comments received. Unless changed, the AO will be based upon the following conditions:

General Conditions:

1. This AO applies to the following company:

Corporate Office Location
XTO Energy, Incorporated
810 Houston Street
Fort Worth, Texas 76102-6298

Phone Number (813) 870-2800
Fax Number (801) 870-1671

The equipment listed in this AO shall be operated at the following location:

Remote Emery County location
Huntington 1 natural gas compressor station, located 3 miles west of Huntington along Huntington Creek, NE/4 of NE/4 Section 15, T17S, R8E (see the map on file)

Directions to Site
From Huntington, Utah travel west along highway 31 for approximately three miles. The Huntington 1 NGCS is visible to the south of the highway.

Universal Transverse Mercator (UTM) Coordinate System: UTM Datum NAD 1927
4,355,249 meters Northing, 499,465 meters Easting, Zone 12

2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307) and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules.
3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.
4. Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved in accordance with R307-401.
5. All records referenced in this AO or in applicable MACT standards, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request. All records shall be kept for a minimum five-year period.
6. XTO shall install the natural gas compressor engines and operate the Huntington 1 NGCS in accordance with the terms and conditions of this AO, which was written pursuant to XTO's NOI submitted to the Division of Air Quality (DAQ) on September 14, 2007 and additional information submitted to the DAQ on October 4, 2007, October 10, 2007, December 12, 2007, December 13, 2007, February 1, 2008, February 4, 2008, February 5, 2008, and February 7, 2008.
7. This AO shall replace the AO (DAQE-AN2662005-05) dated September 20, 2005.
8. The approved installations shall consist of the following equipment (or equivalent*):
 - A. Three (3) Internal Combustion Compressor Engines

Fuel:	Natural gas
Site rating:	1,245 hp
Attached control device:	Catalytic converter at the engine exhaust stack
 - B. One (1) Natural Gas Dehydrator

Attached Equipment:	Boilers
Fuel:	Natural gas
Heating Capacity:	1,500,000 Btu/hr
 - C. One (1) Amine Unit

Attached Equipment:	Boilers
Fuel:	Natural gas
Heating Capacity:	30,000,000 Btu/hr

D.	Four (4) Storage Tanks	
	Service:	Natural gas condensates, Water, Oil or miscellaneous solids
	Capacity:	16,800 gallons – each
	Attached equipment:	Tank Heater – each
	Fuel:	Natural Gas
	Burner Capacity:	250,000 Btu/hr - each

* Equivalency shall be determined by the Executive Secretary.

9. XTO shall notify the Executive Secretary in writing when the installation of the equipment listed in Condition #8-A has been completed and is operational. To insure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If the construction and/or installation is not complete within eighteen months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the construction and/or installation. At that time, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO in accordance with R307-401-18.

Limitations and Tests Procedures

10. Emissions to the atmosphere at all times from the indicated emission point(s) shall not exceed the following rates and concentrations:

Source: (Internal Combustion Compressor Engines)

<u>Pollutant</u>	<u>lb/hr</u>	<u>ppmdv</u> (3% O ₂ dry)
NO _x	0.52.....	104.24
CO	0.86.....	216.89

11. Stack testing to show compliance with the emission limitations stated in the above condition shall be performed as specified below:

A.	<u>Emissions Point</u>	<u>Pollutant</u>	<u>Testing Status</u>	<u>Test Frequency</u>
	Internal Combustion	NO _x	*	@
	Compression Engines	CO	*	@

B. Testing Status

- * Initial compliance testing is required. The initial test shall be performed as soon as possible and in no case later than 180 days after the start up of a new emission source. A compliance test is required on the emission point that has an emission rate limit.

- @ Compliance test at least once every five years or perform annual portable analyzer testing, subsequent to the initial compliance test. The Executive Secretary may require testing at any time.

C. Notification

The Executive Secretary shall be notified at least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Executive Secretary.

The source test protocol shall be approved by the Executive Secretary prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. A pretest conference shall be held, if directed by the Executive Secretary.

D. Sample Location

The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Executive Secretary. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

E. Volumetric Flow Rate

40 CFR 60, Appendix A, Method 2 or other testing methods approved by the Executive Secretary.

F. Nitrogen Oxides (NO_x)

40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, 7E, or other testing methods approved by the Executive Secretary.

G. Carbon Monoxide (CO)

40 CFR 60, Appendix A, Method 10, or other testing methods approved by the Executive Secretary.

H. Calculations

To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary, to give the results in the specified units of the emission limitation.

I. New Source Operation

For a new source/emission point, the production rate during all method-testing shall be no less than 90% of the production rate listed in this AO. If the production rate listed in this AO has not been achieved at the time of the test, then method-testing shall be conducted at no less than 90% of the maximum production rate achieved as of the date of the test.

J. Existing Source Operation

For an existing source/emission point, the production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

K. Internal Combustion Engines

Portable testing analyzers may be used to test natural gas fired IC engines. If portable analyzer testing is employed, a correlation must be established during the initial tests between the portable testing analyzer and Method 7, 7A, 7B, 7C, 7D, 7E, and 10. The portable analyzer must be calibrated as per the manufacturer's specification prior to each test. Notification of each annual portable test must be provided as per condition 11.C above.

12. Visible emissions from any stationary point or fugitive emission source associated with the source or with the control facilities shall not exceed 10% opacity. Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9.

Fuels

13. The owner/operator shall use natural gas as fuel in the compressor engines, boilers, and tank heaters.

Federal Limitations and Requirements

14. In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subpart A, 40 CFR 60.1 to 60.18 (General Provisions), Subpart Dc, 40 CFR 60.40c to 60.48c (Standards of Performance for Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), and Subpart JJJJ, 40 CFR 60.4230 to 60.4248 (Standards of Performance for Stationary Spark Ignited Internal Combustion Engines) apply to this installation.
15. In addition to the requirements of this AO, all applicable provisions of 40 CFR 63, National Emission Standards for Hazardous Air Pollutants for Source Categories Subpart HH, 40 CFR 63.760 to 63.779 (National Emission Standard for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities) apply to this installation.

Records & Miscellaneous

16. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on the information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on the equipment authorized by this AO shall be recorded.
17. The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring.
18. The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the DAQ. The UAC R307 rules used by DAQ, the NOI guide, and other air quality documents and forms may also be obtained on the Internet at the following web site:

<http://www.airquality.utah.gov/>

The annual emissions estimations below include point source and fugitive emissions, and do not include fugitive dust, road dust, tail pipe emissions, or grandfathered emissions. These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, non-attainment area, Maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The Potential To Emit (PTE) emissions for the Huntington 1 NGCS are currently calculated at the following values:

	<u>Pollutant</u>	<u>Tons/yr</u>
A.	PM ₁₀	1.25
B.	SO ₂	0.09
C.	NO _x	77.39
D.	CO	34.59
E.	VOC	38.99

F.	HAPs	
	Benzene	0.46
	Formaldehyde	2.16
	Other HAPs.....	2.67
	(Ethyl Benzene, n-Hexane, Toluene, Xylenes)	
	Total HAPs	5.29

The DAQ is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final AO.

Sincerely,

John T. Blanchard, Manager
Minor New Source Review Section